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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,394	10/17/2005	Kazuaki Tsuji	03039PCT	1632
23165	7590	08/02/2006	EXAMINER	
ROBERT J JACOBSON PA 650 BRIMHALL STREET SOUTH ST PAUL, MN 551161511				LEE, GILBERT Y
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/549,394	TSUJI ET AL.
	Examiner	Art Unit
	Gilbert Y. Lee	3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 6-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 6,8 and 9 is/are rejected.  
 7) Claim(s) 7 and 10 is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 14 September 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. 20060720.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: Examiner's Attachment A&B.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Claim Objections***

2. Claim 9 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6, 8, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "projects outside" in claim 6 lines 22 and 25 is a relative term which renders the claim indefinite. The term "projects outside" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purposes of this examination, the examiner is interpreting the first and second projecting edges to be projecting away from a centerline of the seal material.

Claim 8 recites the limitation "said second projecting edge is formed by connecting a pair of straight edges together in a convexly crooked shape". It is unclear as to how a pair of straight edges constitutes a convex. The Webster's II New Riverside Dictionary defines convex as: curved or rounded outward like the surface of a ball. It is suggested that the term convex be changed to substantially triangular or pyramidal. For the purposes of this examination, the examiner is interpreting the claim as to claim a pair of straight edges making a substantially triangular shape.

Claim 10 recites the limitation "is fitted to said ant groove...said ant groove of the ring shape". It is unclear to the examiner as to what the applicant is claiming. For the purposes of this examination, the examiner is interpreting the claim as to mean that the shape of the seal material corresponds to the shape of the ant groove.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Engstrom (US Patent No. 3,909,017).

Note for references A-E see Examiner's Attachment A.

Regarding claim 6, the Engstrom reference discloses a sealing material (Col. 2, Line 8) for an ant groove (5), which is fitted to the ant groove made in a surface of either one of members in a joint place (11, 12) between these members and contacts with a surface of the other member (Fig. 3), thereby sealing both the members, with the sealing material comprising:

an elastically deformable material (Col. 2, Line 8); and

a sectional shape (Fig. 2) having a straight bottom edge (A) which is disposed on a bottom face of said ant groove (Fig. 2); an arched convex edge (B) which contacts

with the surface of said other member facing said ant groove (Fig. 3); a first projecting edge (C) which connects with one end of said bottom edge and projects outside (Fig. 2); a concave inlet portion (9) which is located between said first projecting edge and said arched convex edge (Fig. 2); a second projecting edge (D) which connects with the other end of said straight bottom edge and is composed of straight lines that project outside (Fig. 2); a straight sloping edge (E) of which one end connects with the opposite end of said arched convex edge as to said first projecting edge and of which the other end connects with said second projecting edge (Fig. 2); and at least one corner portion (F) which is constituted in the range of from said straight bottom edge via said second projecting edge to said sloping edge (Fig. 2);

wherein: when the sealing material for the ant groove is fitted to said ant groove, said concave inlet portion is disposed on an opening edge of the ant groove (Fig. 2), and the sealing material for the ant groove gets pressed into the ant groove (Fig. 2).

Note that the English equivalents to the patents described in the specification recite that the groove is an annular groove and has been treated as such for the examination of this application. Also note that the straight slope is connected to the arched convex edge through a concave portion (Fig. 2) and the sealing material is capable of gyrating.

5. Claims 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kane et al. (US Patent No. 6,932,354).

Note for references G-O see Examiner's Attachment B.

Regarding claim 6, the Kane et al. reference discloses a sealing material (Col. 1, Lines 35-36) for an ant groove (Col. 2, Lines 18-22), which is fitted to the ant groove

made in a surface of either one of members in a joint place (e.g. 14 and 16 comprising one member and the second member being disclosed in Col. 3, Lines 1-4) between these members and contacts with a surface of the other member (Col. 3, Lines 1-4), thereby sealing both the members, with the sealing material comprising:

an elastically deformable material (Col. 1, Lines 35-36); and  
a sectional shape (Fig. 3) having a straight bottom edge (G) which is disposed on a bottom face of said ant groove (Fig. 3); an arched convex edge (12) which contacts with the surface of said other member facing said ant groove (Fig. 3); a first projecting edge (H) which connects with one end of said bottom edge and projects outside (Fig. 3); a concave inlet portion (I) which is located between said first projecting edge and said arched convex edge (Fig. 3); a second projecting edge (e.g. J and M) which connects with the other end of said straight bottom edge and is composed of straight lines that project outside (Fig. 3); a straight sloping edge (K) of which one end connects with the opposite end of said arched convex edge as to said first projecting edge and of which the other end connects with said second projecting edge (Fig. 3); and at least one corner portion (e.g. L) which is constituted in the range of from said straight bottom edge via said second projecting edge to said sloping edge (Fig. 3)

wherein: when the sealing material for the ant groove is fitted to said ant groove, said concave inlet portion is disposed on an opening edge of the ant groove (Fig. 3), and the sealing material for the ant groove gets pressed into the ant groove (Col. 2, lines 30-37). Note that the English equivalents to the patents described in the specification recite that the groove is an annular groove and has been treated as such

for the examination of this application. Also note that the straight slope is connected to the arched convex edge through a concave portion and horizontal edge (Fig. 3).

Regarding claim 8, the Kane et al. reference discloses said second projecting edge being formed by connecting a pair of straight edges (J and M) together in a triangular shape; and

    said corner portion being constituted in the following three places: a place between said straight bottom edge and said second projecting edge (L); a crooked place of said second projecting edge (N); and a place between said second projecting edge and said sloping edge (O).

#### ***Allowable Subject Matter***

Claims 7 and 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gilbert Y. Lee whose telephone number is 571-272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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GL  
7/21/06

EXAMINER'S ATTACHMENT A

U.S. Patent Sept. 30, 1975

3,909,017

Fig. 1

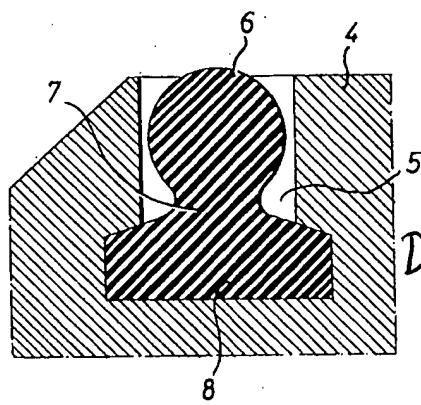


Fig. 2

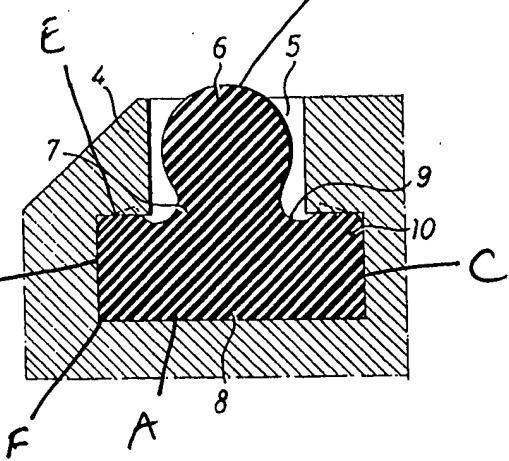
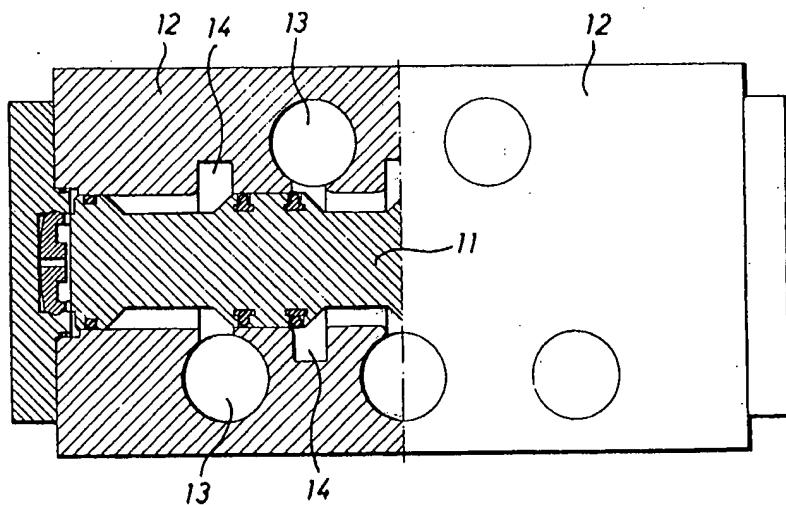


Fig. 3



EXAMINER'S ATTACHMENT B

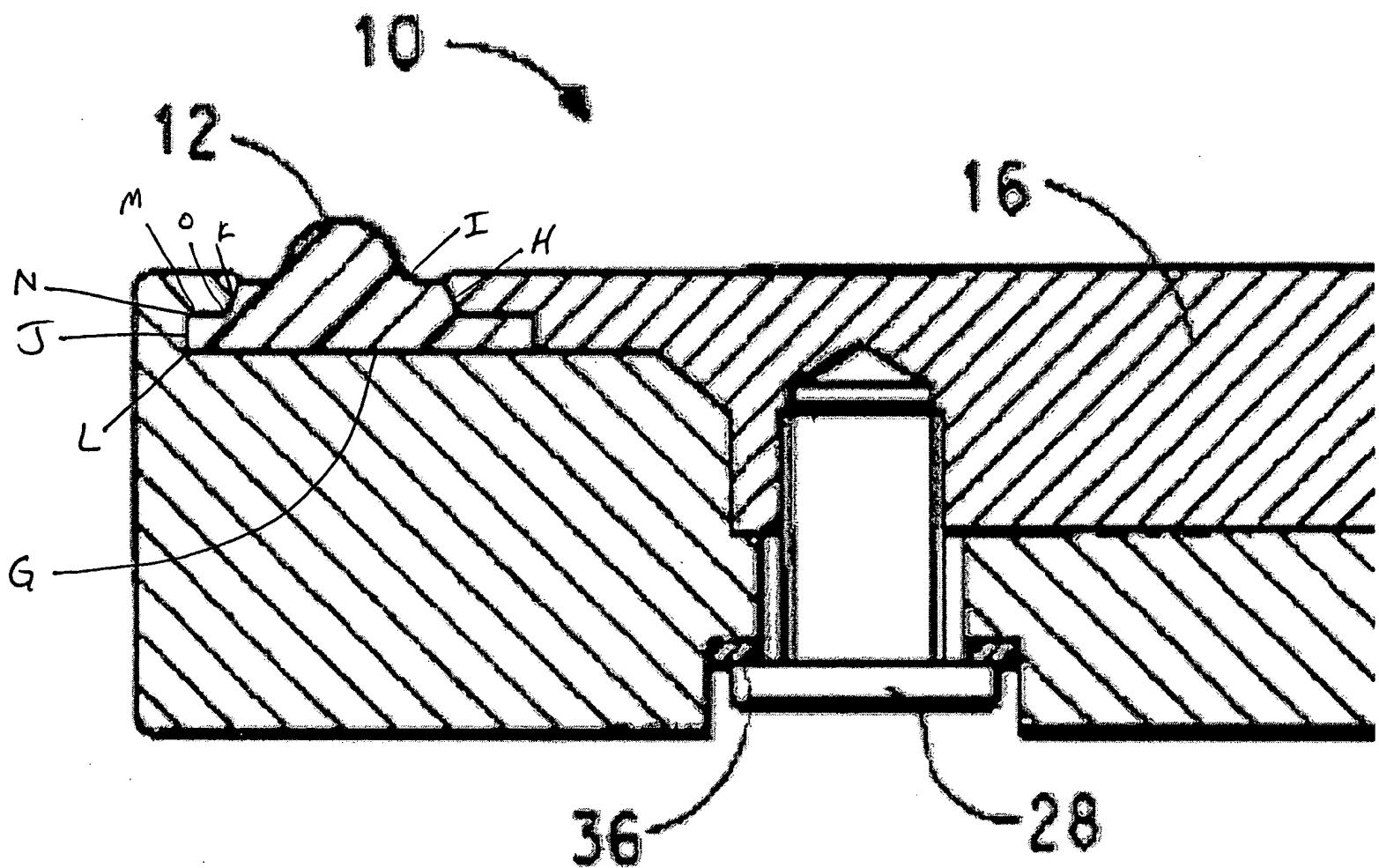


FIG. 3